

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1. (currently amended): A device comprising:

an industrial control unit operable to control one or more USB devices in an industrial plant;

an industrial control panel operable to communicate with said industrial control unit as a USB device and further operable to control various functions of the industrial plant; and

a communication link connecting said industrial control unit to said industrial control panel and operable to facilitate the communications therebetween;

wherein said industrial control panel comprises a plurality of integrated functional units operable to respectively carry out the various functions of the industrial plant, each of ~~which is~~ the functional units being furnished with a respective USB controller, and an integrated USB hub operable to inter-connect the USB controllers ~~to of~~ of the respective functional units, ~~and wherein~~ further, said industrial control panel is connected to said industrial control unit via said communication link.

2. (original): A device according to claim 1, wherein said industrial control unit comprises a USB interface, and said communication link is a USB line that is connected to the USB interface of said industrial control unit.

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3. (original): A device according to claim 1, wherein the functional units are input and output components.

4. (original): A device according to claim 3, wherein the functional units are selected from a group comprising an operator keyboard, a touch screen input unit, a status display, a key display, a touch pad, a roller ball, and a piezo pad.

5. (original): A device according to claim 1, wherein the functional units comprise a communication interface operable to connect additional control devices and output devices or for temporary connection of mass storage devices.


6. (original): A device according to claim 1, wherein a line length of said communication link is greater than 5 meters.

7. (original): A device according to claim 1, wherein the USB hub is connected to said industrial control unit via a two-wire connection.

8. (original): A device according to claim 1, further comprising:
an additional USB hub assigned to said control panel, said additional USB hub being connected to the functional units of said control panel via a first USB line, and connected to the

functional units of at least one additional control panel via a second USB line, and connected to said industrial control unit via a third USB line.

9. (original): A device according to claim 8, wherein said additional USB hub is physically integrated into said control panel.

 10. (currently amended): An industrial control panel comprising:
a plurality of integrated functional units, each of which is associated with a respective USB controller and wherein one or more of said functional units is operable to control a respective function within an industrial plant; and
an integrated USB hub operable to inter-connect ~~the~~ said USB controllers of ~~the~~ said functional units,
wherein said industrial control panel is connected to a secondary device via a communication link operably connected to said integrated hub.

11. (currently amended): An industrial control panel according to claim 10, wherein one or more of said functional units are input and output components.

12. (original): An industrial control panel according to claim 11, wherein said functional units are selected from a group comprising an operator keyboard, a touch screen input unit, a status display, a key display, a touch pad, a roller ball, and a piezo pad.

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13. (currently amended): An industrial control panel according to claim 10, wherein said functional units comprise a communication interface operable to connect additional control devices and output devices or for temporary connection of mass storage devices to ~~the~~ said industrial control panel.

14. (currently amended): A method for sending control signals within an industrial facility, said method comprising:

providing an industrial control unit operable to control one or more USB devices within the industrial facility;

providing an industrial control panel as one of the USB devices and comprising ~~having a~~ plurality of functional units, each functional unit having a respective USB controller; and

operably connecting said industrial control unit to each of the plurality of functional units via a USB hub integrated within said industrial control panel and having a panel connection with a corresponding connection for each of the functional units and a control unit connection for sending or receiving control signals to or from said industrial control unit.

15. (original): A method for sending control signals as set forth in claim 14, further comprising:

providing a front USB interface device;

providing an external device;

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operably connecting the external device to the USB hub through the front USB interface device; and

sending control or data signals to the external device from the industrial control unit via the USB hub and the front USB interface device.
